RANCHO SANTA ANA BOTANIC GARDEN

LEAFLETS

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ACER NEGUNDO CALIFORNICUM

CALIFORNIA BOX-ELDER

Prepared

by

RANCHO SANTA ANA BOTANIC GARDEN

of the

NATIVE PLANTS OF CALIFORNIA

Santa Ana Canyon
Orange County
California

ACER NEGUNDO CALIFORNICUM
CALIFORNIA BOX-ELDER

Aceraceae — Maple Family

A round-topped, spreading, deciduous tree reaching a height of about 60 ft. and having a rough reddish trunk often 4 ft. in diam. Young branches green or reddish, minutely hairy. Leaves opposite, pinnately 3 or 5-foliate, the leaflets petiolulate, light green when young, becoming darker at maturity; terminal leaflet usually the largest, 4-6 in. long, equally broad, irregularly coarsely toothed (sometimes forming 3 nearly equal lobes); lateral leaflets smaller; upper surfaces nearly glabrous, the lower with hairs throughout, but mainly along the veins. Flowers of two sorts, the staminate (male) and pistillate (female) borne on separate trees and appearing shortly after the leaves in early spring. Staminate flowers in dense clusters on long hair-like drooping pedicels, the stamens 4-5. Pistillate flowers borne in racemes of about 10-20, lacking petals, the ovary superior, developing into a 2-celled samara (winged fruit), this reddish when young, straw colored at maturity and essentially hairless. Usually a large percentage of the fruits are sterile. In the seedlings the linear cotyledons appear above ground, are $\frac{1}{2}$-$1\frac{1}{2}$ in. long; the later few pairs of leaves are simple but irregularly serrate.

The genus Acer (the early Latin name for the maple) consists of about 120 species, widely distributed in North America, Asia, Europe and 1 species in Africa. Four species are found in California.

Acer negundo californicum was described in 1838 by Torrey and Gray, American botanists, who at the time were writing a flora of North America. The original specimens were collected by Douglas, a contemporary explorer, who probably got his material along one of the numerous streams in the vicinity of Monterey. Torrey and Gray described the California Box-Elder under the name of Negundo Californicum. C. S. Sargent, of the Arnold Arboretum, reduced the California Box-Elder to a variety of Acer negundo ln 1891. Most botanists now use the generic name Acer for all of those species formerly considered under Negundo, although Negundo differs from Acer in that the leaves are pinnately divided and the plants are dioecious (flowers of different sexes borne on different plants).

The California Box-Elder, although widely distributed within California, does not occur elsewhere. It is a common tree along

the rivers and creeks at low elevations in the Sacramento and San Joaquin Valleys. It is plentiful in similar situations in the Coast Ranges from Santa Barbara Co. to Mendocino Co. It has also been found near Yreka, Siskiyou Co. In Southern California it is known from a few localities in the Santa Monica Mtns. and from the vicinity of Oak Glen in the San Bernardino Mtns. Along the rivers in the hot interior valleys of California the native stands of the California Box-Elder, with their dense crowns, provide numerous natural sites for shady recreational areas.

Many fine large trees of the California Box-Elder are found in cultivation in California, where they have been used to advantage for roadside, parkway, park and private plantings. They thrive in nearly all types of soils, stand extreme heat, grow rapidly when given ample water and make welcome shade throughout the spring, summer and fall. Their worst features are that the branches are fairly brittle and that they drop their leaves and fruits (pistillate trees only) over a considerable period.

Propagation of the California Box-Elder is not at all difficult from freshly gathered seeds (obtained from September to November). These should be planted immediately in outside beds or boxes. When the seedlings are 2-4 in. high they should be set out in field rows and watered throughout the season. By fall they will attain heights of 2-4 ft. and should be carefully dug as soon as dormant and planted in their permanent places. Trees left 2 seasons in the field rows will attain heights of 12-16 ft., but are more difficult to handle and ordinarily have to be cut back. Oftentimes such trees produce numerous suckers, one of which can frequently be allowed to form a new main shoot, after which the others should be removed. Large quantities of trees may also readily be grown in seed beds without transplanting during the first season. For best results these should not be crowded. They can be set out in their permanent places at the end of the first growing season or they may be transplanted to field rows for another season. Bare root trees purchased from nurserymen should be set out not later than early February to insure good growth.

If only staminate trees are desired they can be grown from hardwood cuttings taken from staminate trees. Although we have not tried this method, it is said (Bailey Encyclopedia) to be entirely satisfactory.

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Of The Native Plants of California.

Established 1927

In Memory of John W. Bixby

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Purpose: A scientific institution devoted to the growth and study of the native plants of California for their botanical, horticultural and popular features.

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